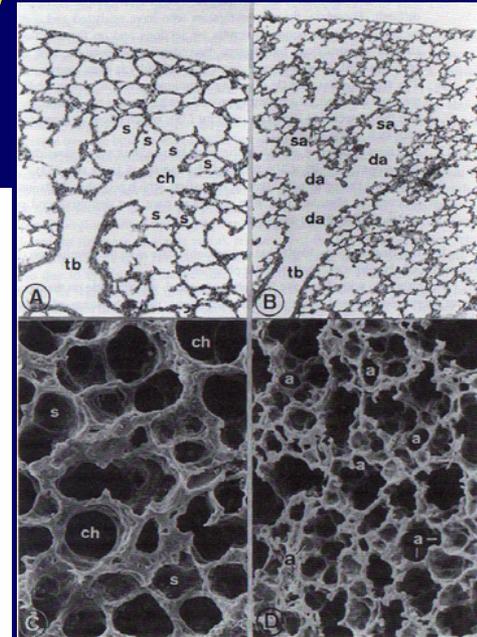
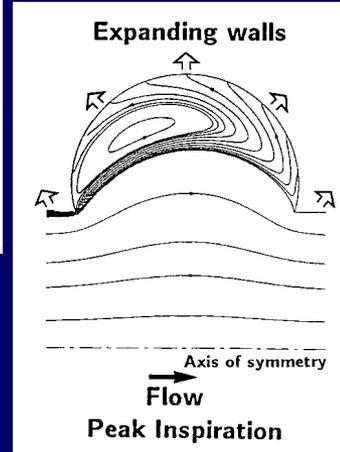
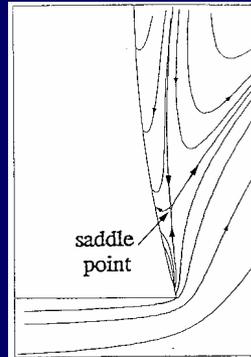


# Particles in the Developing Lung: Bioengineering Approach

BRP HL07542 (P.I. Akira Tsuda)

**Question:** Is aerosol deposition /clearance different in children's lung from that in adult lung?

**Hypothesis:** Aerosol deposition in the developing lung is governed by age-dependent structural alveolation.



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**Objective:** to develop a combination of bioengineering tools (e.g., computational/analytical fluid mechanics models, the state-of-the-art aerosol inhalation/detection methodology) to test the hypothesis in animal model (rat).

